CLAIMS:

1. A plant expression vector comprising a promoter, a blocking sequence, and a structural gene, said blocking sequence being flanked by a pair of directly repeated FRT recombination sequences wherein the structural gene becomes operably linked to the promoter only after the removal of said blocking sequence.

2. The expression vector of claim 1, wherein the structural gene encodes a product that disrupts normal cell function.

3. The expression vector of claim 1, further comprising a gene encoding a eukaryotic selectable marker.

4. The expression vector of claim 3, wherein said eukaryotic selectable marker gene is flanked by said pair of directly repeated site-specific recombination sequences.

5. A plant expression vector comprising a promoter, a blocking sequence, and a polylinker region, said blocking sequence being flanked by a pair of directly repeated site-specific recombination sequences and positioned between said promoter and said polylinker region.

6. The expression vector of claim 5, further comprising a gene encoding a eukaryotic selectable marker.

7. The expression vector of claim 5, further comprising nucleic acid sequences that enable replication of the expression vector in a bacterial host, and a gene encoding a bacterial selectable marker.

8. A plant entity, or progeny thereof, consisting essentially of a plant cell, seed or plant produced from the *in vitro* introduction of the DNA sequence of claim 1 into a plant cell.

9. A method for biosynthetically producing commercially valuable compounds, said method comprising the steps of

producing a fertile transgenic plant by introducing into plant cells a DNA construct comprising a promoter, a blocking sequence, and a structural gene, said blocking sequence being flanked by a pair of directly repeated site-specific recombination sequences and wherein the structural gene becomes operably linked to the promoter only after the removal of said blocking sequence;

cross fertilizing said transgenic plant to produce transgenic plants that are homozygous for the gene encoding said biologically detrimental compound;

crossing said homozygous transgenic plant with a plant having a DNA sequence comprising a gene encoding a site-specific recombinase that recognizes said site-specific recombination sequences.

10. A method for biosynthetically producing commercially valuable compounds, said method comprising the step of

cross pollinating a maintainer plant line having a DNA sequence comprising a promoter, a blocking sequence, and a structural gene, said blocking sequence being flanked by a pair of directly repeated site-specific recombination sequences, with an inducer plant line having a DNA sequence comprising a gene encoding a site-specific recombinase that recognizes said site-specific recombination sequences, wherein the structural gene becomes operably linked to the promoter only after the removal of said blocking sequence in the F1 progeny plants.

11. The method of claim 10 wherein the promoter of the structural gene is a seed specific promoter.

12. The method of claim 10 wherein the promoter of the structural gene is a leaf specific promoter.

13. The method of claim 10 wherein the blocking sequence is flanked by a pair of directly repeated FRT recombination sequences and the recombinase gene encodes the FLP recombinase.

14. A method for biosynthetically producing commercially valuable compounds, said method comprising the steps of

producing a maintainer plant line by introducing into plant cells a multi-functional DNA sequence comprising a promoter, a blocking sequence, and a structural gene, said blocking sequence being flanked by a pair of directly repeated site-specific recombination sequences and wherein the structural gene becomes operably linked to the promoter only after the removal of said blocking sequence;

crossing said maintainer plant line, or the progeny of said maintainer plant line with an inducer plant line, said inducer plant line having a DNA sequence comprising a gene encoding a site-specific recombinase that recognizes said site-specific recombination sequences.

15. A method for biosynthetically producing commercially valuable compounds, said method comprising the step of

cross pollinating a male sterile maintainer plant line with an inducer plant line wherein,

said male sterile maintainer plant line has a DNA sequence comprising a promoter, a blocking sequence, and a structural gene, said blocking sequence being flanked by a pair of directly repeated site-specific recombination sequences and said blocking sequence comprising a suicide gene operably linked to a seed specific promoter; and

said inducer plant line has a DNA sequence comprising a gene encoding a site-specific recombinase that recognizes said site-specific recombination sequences, wherein the structural gene becomes operably linked to the promoter only after the removal of said blocking sequence in the male fertile F1 progeny plants.

16. The method of claim 16 wherein the promoter of the structural gene is a seed specific promoter.

17. The method of claim 16 wherein the promoter of the structural gene is a leaf specific promoter.

18. The method of claim 16 wherein the blocking sequence is flanked by a pair of directly repeated FRT recombination sequences and the recombinase gene encodes the FLP recombinase.

19. The method of claim 16 wherein the blocking sequence further comprises a selectable marker gene.

sub A2

add C3

add D3

add 91